

Report on demarcation of priority subwatersheds in Ta, Tb and Tc sub-catchments under Tungabhadra catchment in parts of Chitradurga, Bellary Dharwar and Raichur districts of Karnataka State.

ABSTRACT

1. Survey area : Ta, Tb and Tc subcatchments of Tungabhadra catchment
2. Total area surveyed and mapped : 767560 hectares
3. Period of survey : January 1980 - June 1984
4. Total no. of subwatersheds : 277
5. Priority distribution of areas under different priority categories

| Priority category | No. of subwatersheds in each subcatchment | | | Total No. of subwatersheds under each priority category | Total area in each priority in hectares | Percentage |
|-------------------|---|-----------------------|------------------------|---|---|------------|
| | Ta | Tb | Tc | | | |
| 1. Very high | - | 29 (84169) 92.8 | 3 (6517) 7.2 | 32 | 90686 | 11.8 |
| 2. High | 8 (19800) 16.4 | 24 (79078) 65.5 | 8 (21784) 18.4 | 40 | 120662 | 15.7 |
| 3. Medium | 13 (28223) 28.6 | 11 (32281) 32.7 | 13 (38131) 38.7 | 37 | 98635 | 12.9 |
| 4. Low | 17 (39321) 42.4 | 3 (10777) 11.6 | 15 (42662) 46.0 | 35 | 92760 | 12.1 |
| 5. Very Low | 88 (245941) 67.4 | - | 45 (118876) 32.6 | 133 | 364817 | 47.5 |
| <hr/> | | | | | | |
| | 126 | 67 | 84 | 277 | 767560 | 100.0 |

6. Misc. lands like Reservoirs

15167 13625 7100 - 35892 -

Note: An area of 35892 hectares are miscellaneous lands like reservoir coming under Ta, Tb and Tc subcatchments are not taken into consideration while computing total aorage and percentages.

Extent of different soil mapping units with their slope gradients, major crops, grown and extent of soil erosion in Ta, Tb and Tc subcatchments in Tungabhadra catchment

| Soil Unit | Brief Description | Total geographical unit | Percentage | Slope percentage | Soil conservation measures adopted | Major crops grown | Erosion intensity |
|-----------|---|-------------------------|------------|------------------|------------------------------------|------------------------------------|-------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| A | Shallow to moderately deep gravelly soils under thin to moderately dense forest | 85567 | 11.1 | 10-50% | Unbunded | Under forest | Slight erosion |
| C | Moderately deep red gravelly soils | 8106 | 1.0 | 1-3% | Poorly banded | Horsegram, jowar, millets & pulses | Moderate erosion |
| D | Deep to very deep Non-gravelly red soils | 16129 | 2.1 | 1-3% | -do- | -do- | -do- |
| E | Shallow to moderately deep black soils | 44253 | 5.8 | 3-5% | Moderately banded | Cotton, Jowar | -do- |
| E1 | Shallow to moderately deep black soils | | | | Pulses- | -do- | |
| E2 | Shallow to moderately black soils | | | | Poorly banded | Cotton, jowar | -do- |
| | | | | | Well banded | Pulses and etc. | -do- |
| F | Deep to very deep black soils | 153245 | 20.0 | 1-3% | Poorly banded | Cotton, jowar | -do- |
| F1 | -do- | | | 3-5% | Well banded | -do- | -do- |
| I | Rock out crops/inselbergs with thin soil cover | 14172 | 1.8 | 1-25% | Poorly banded | Under grass-cover | Slight erosion |